

FIG. 1

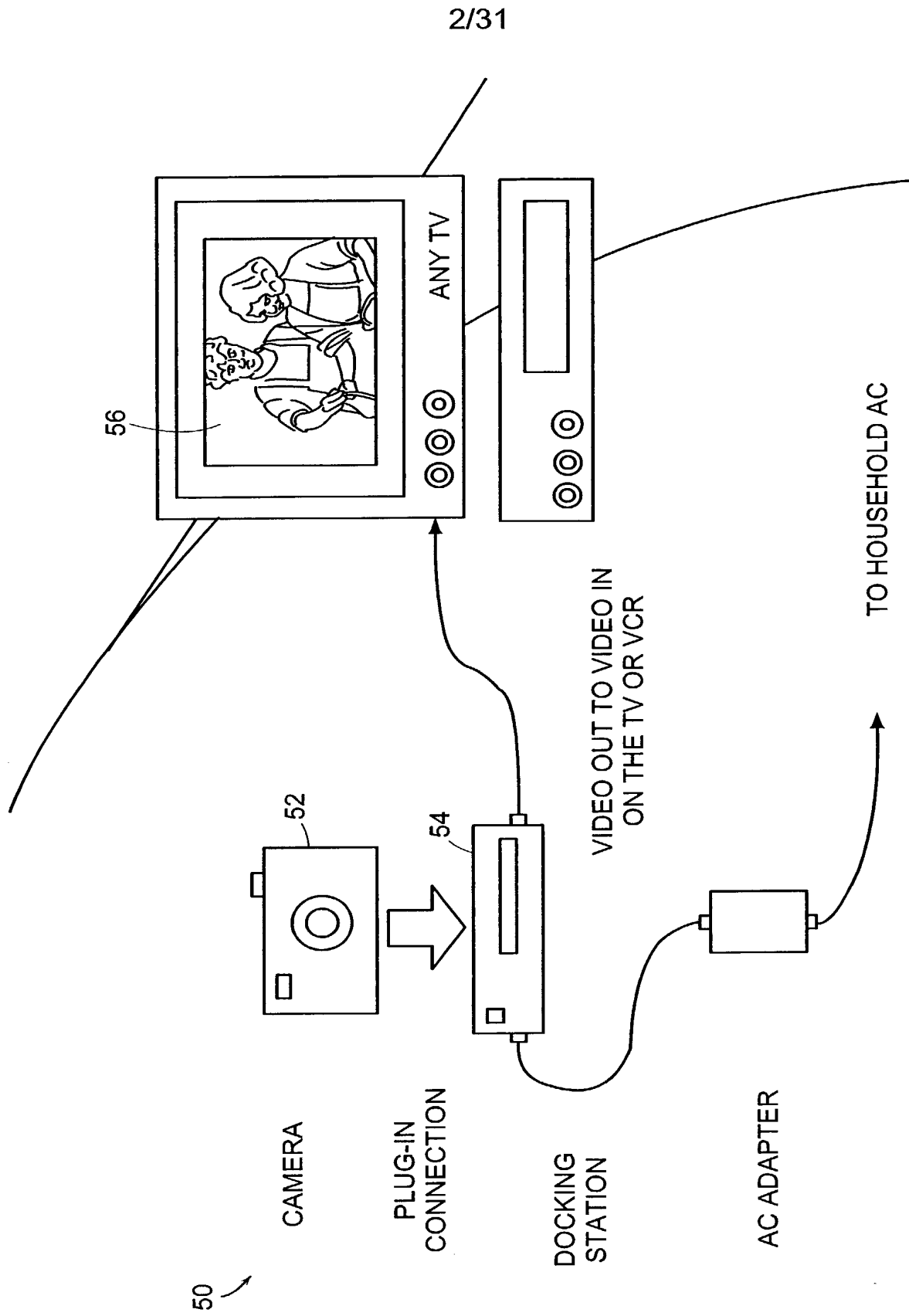


FIG. 2

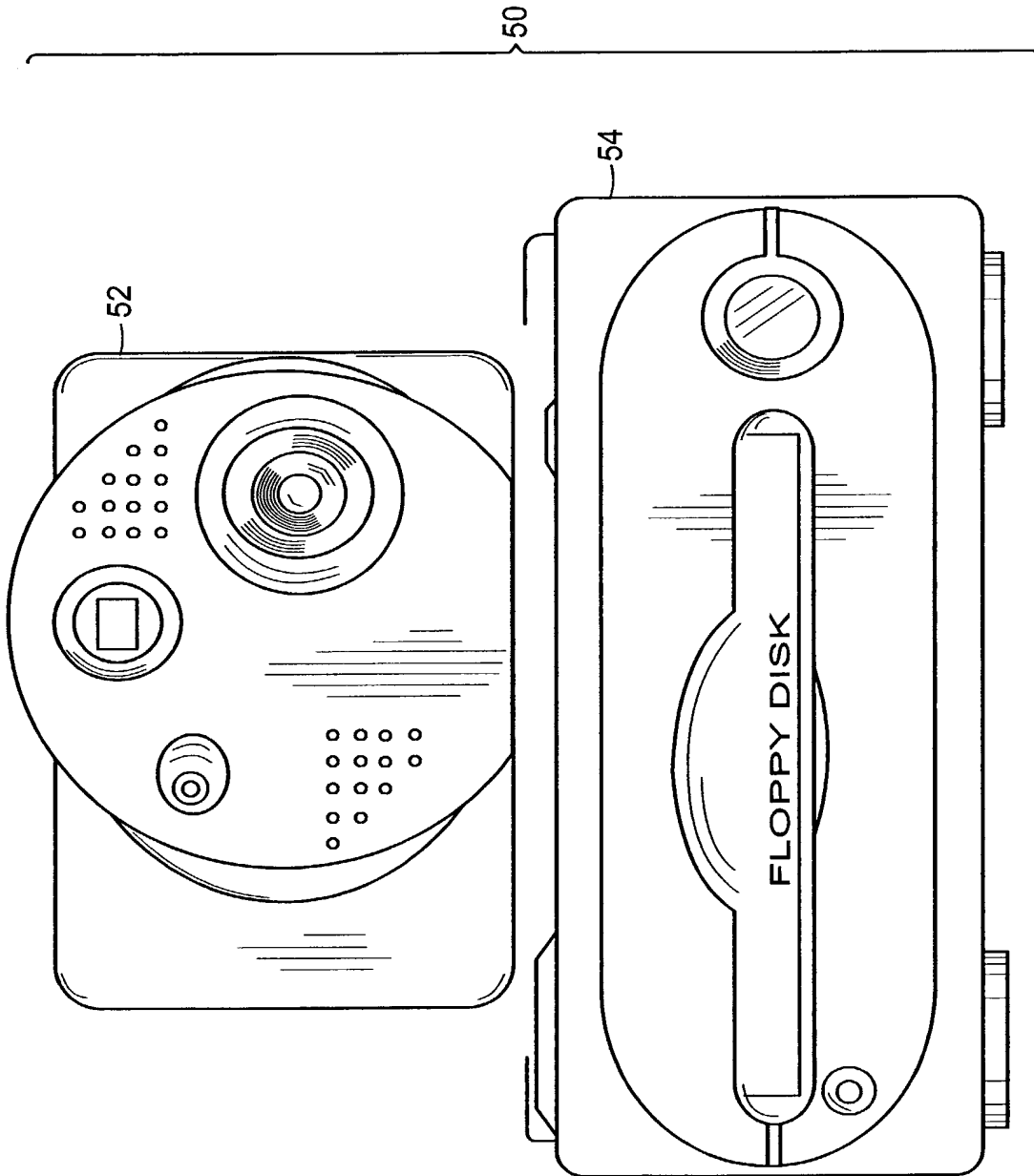


FIG. 3

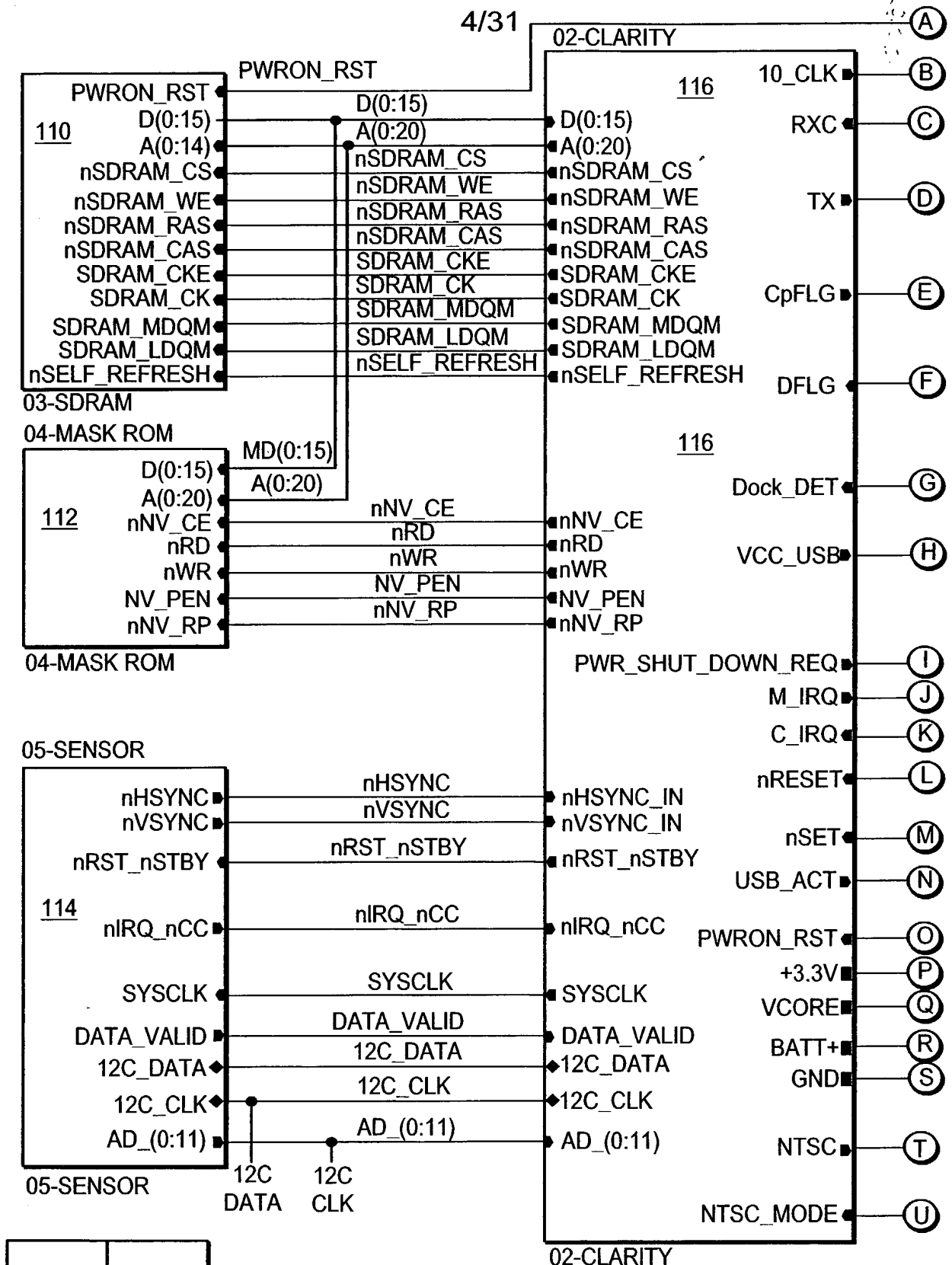
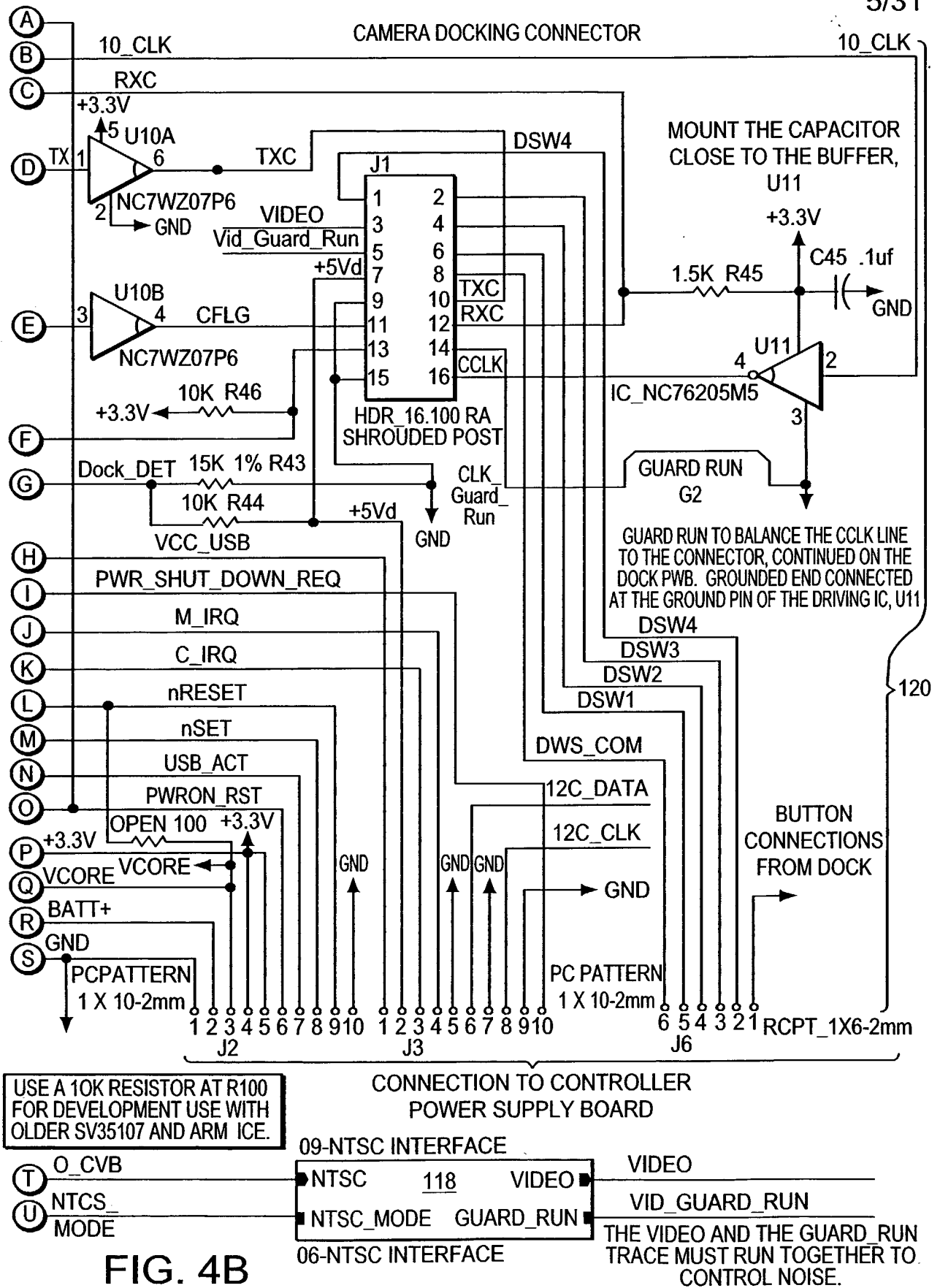


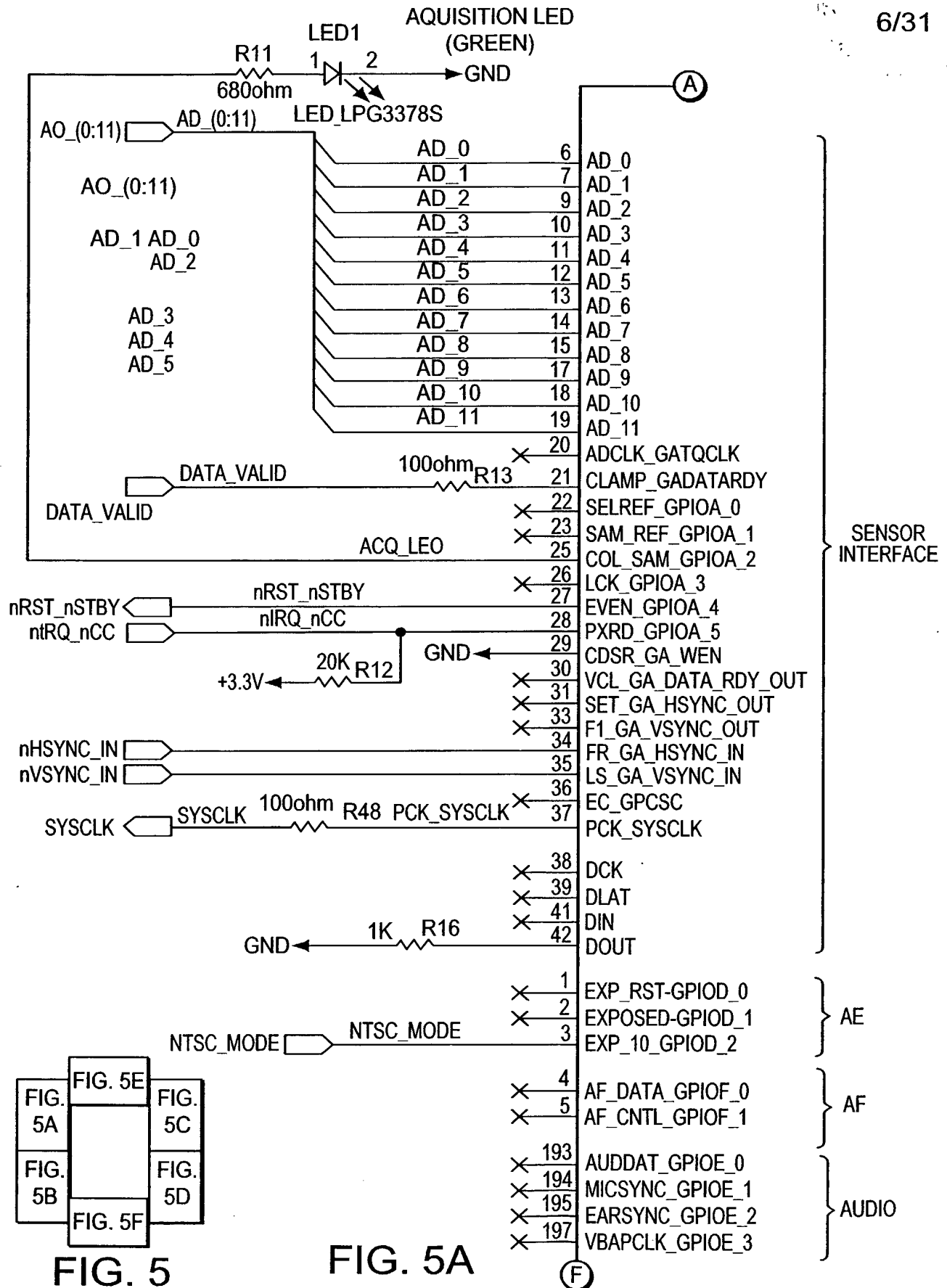
FIG. 4A

FIG. 4B

FIG. 4

FIG. 4A





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PATTERN IS 2 ROWS OF 4 PEDS ON 0.1" CENTERS

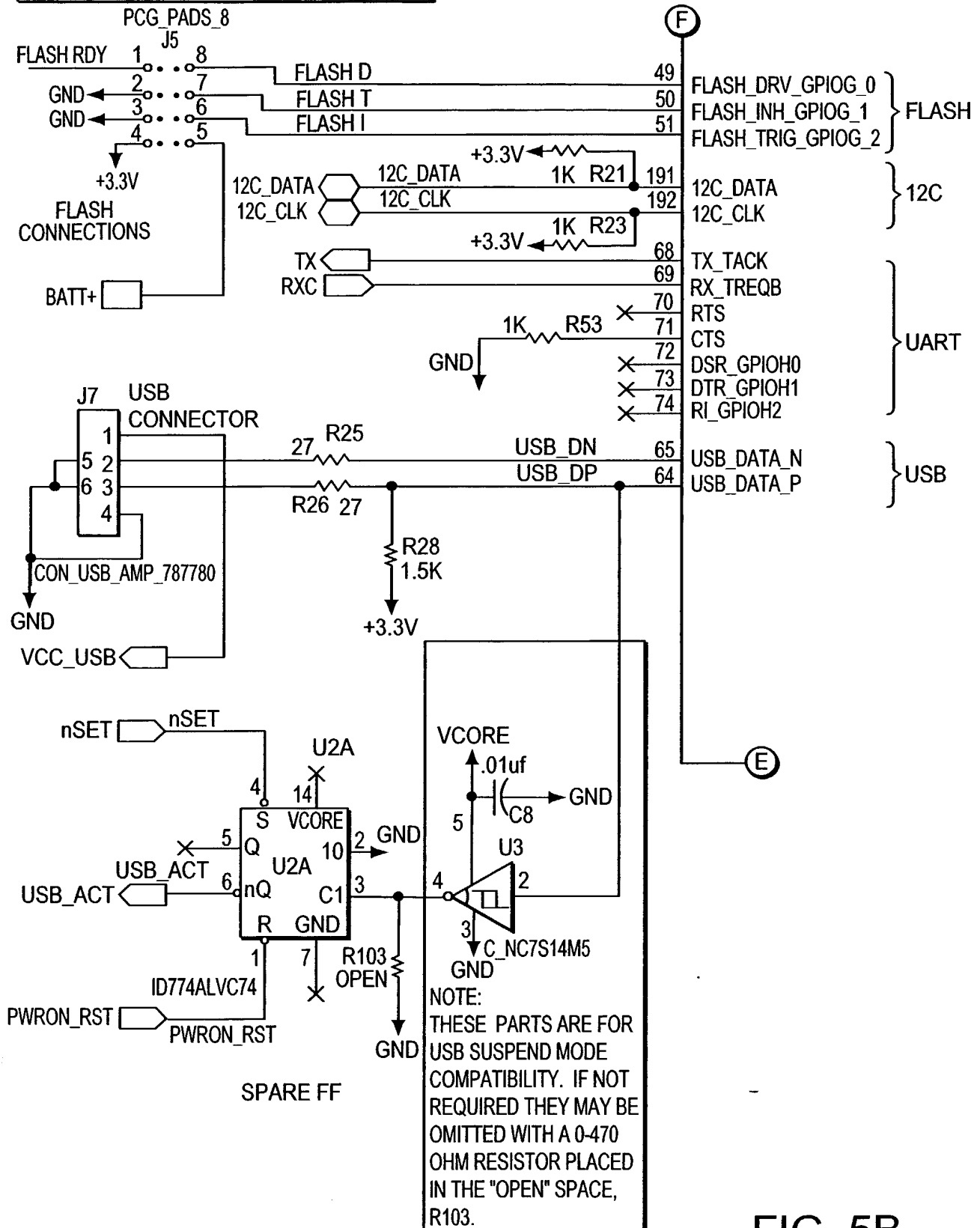
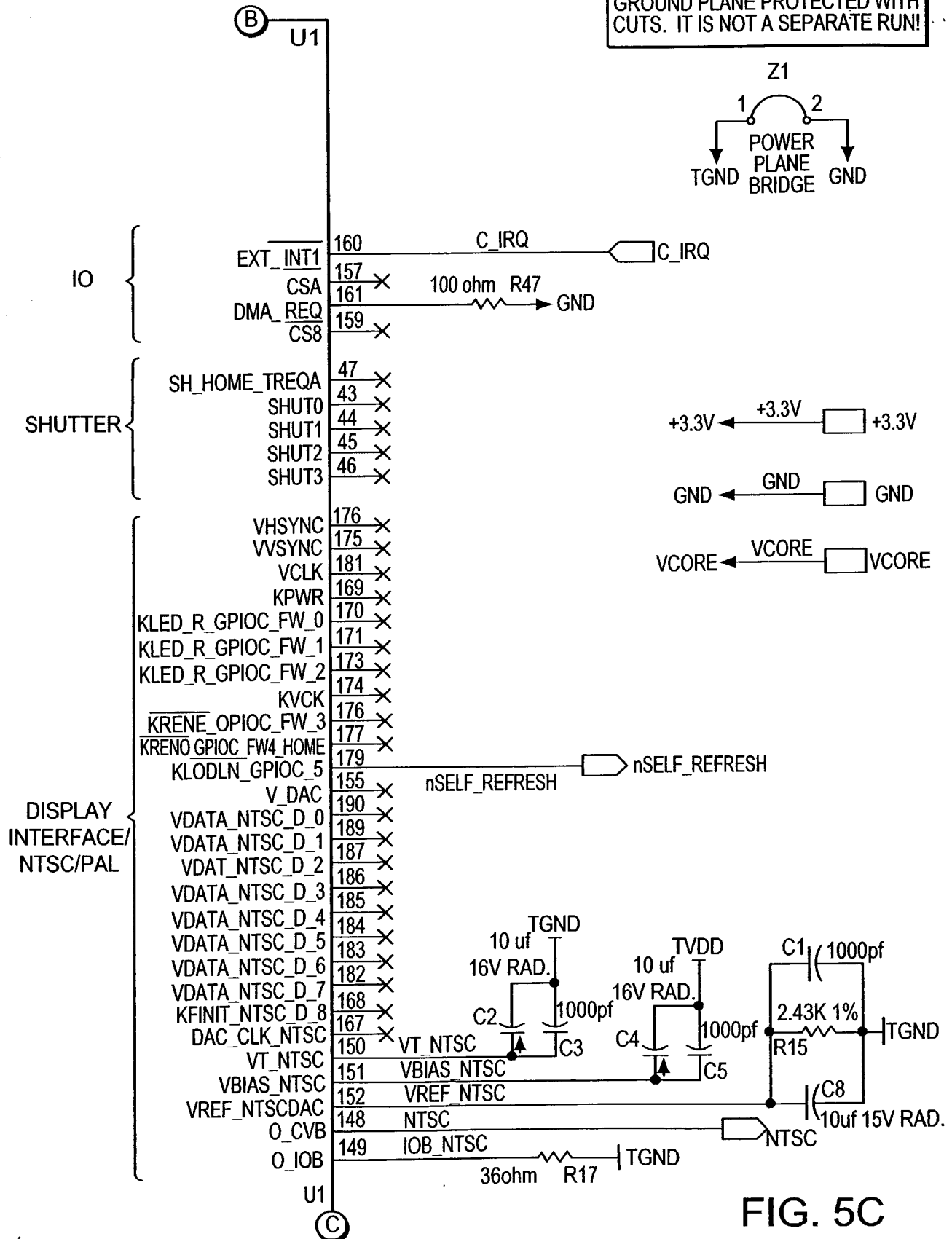


FIG. 5B

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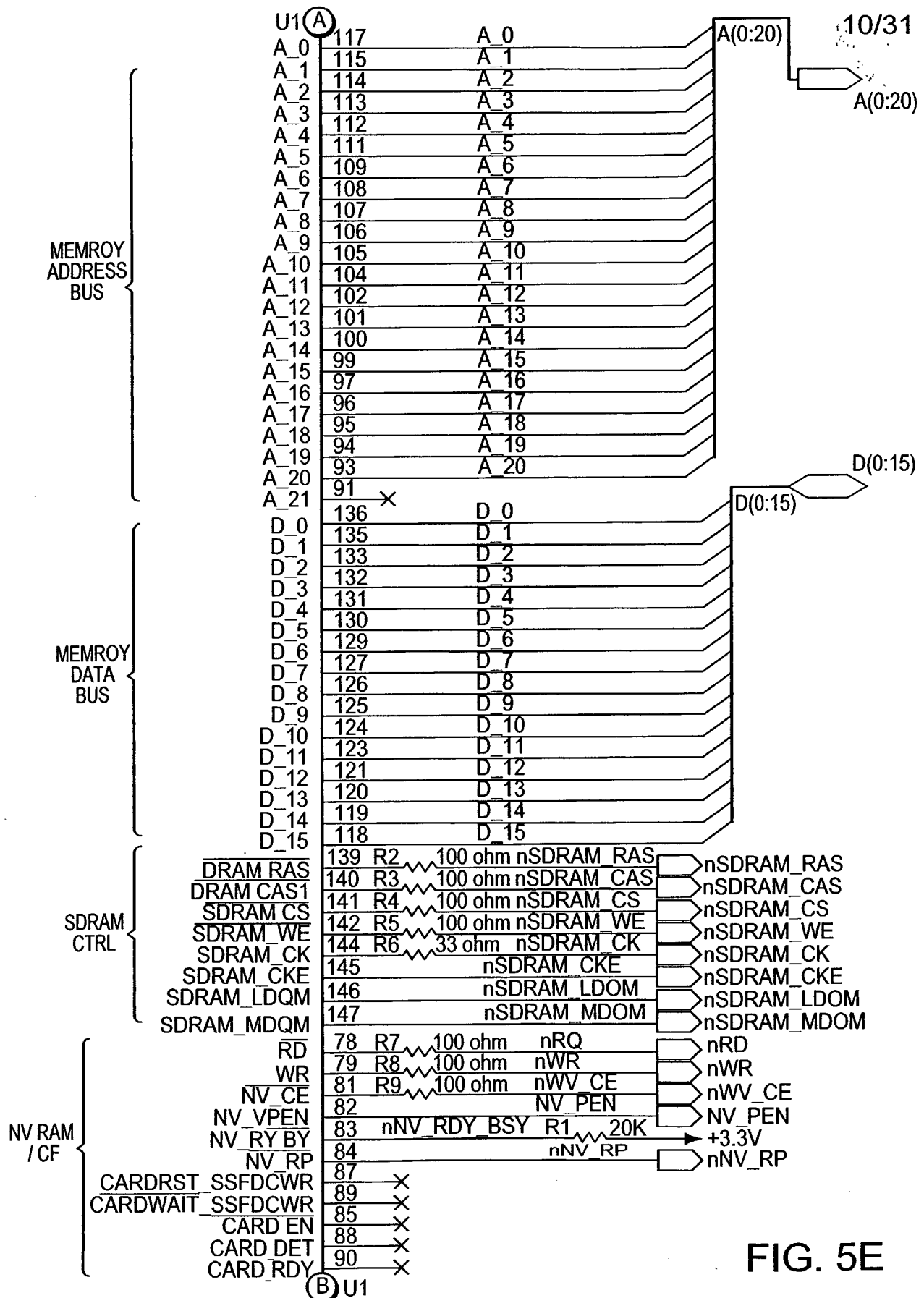
NOTE: TGND IS A PORTION OF THE GROUND PLANE PROTECTED WITH CUTS. IT IS NOT A SEPARATE RUN!



100



FIG. 5D



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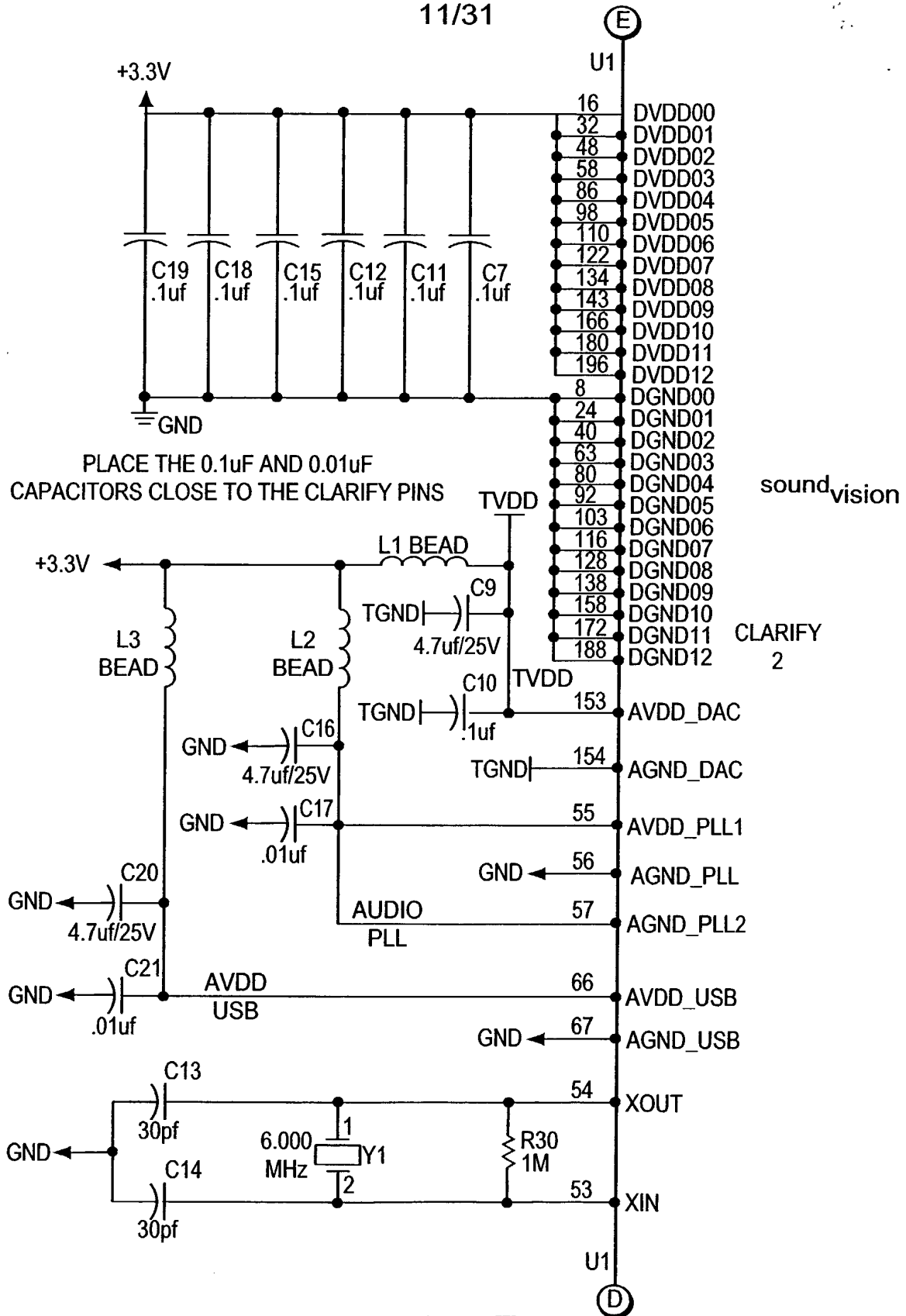
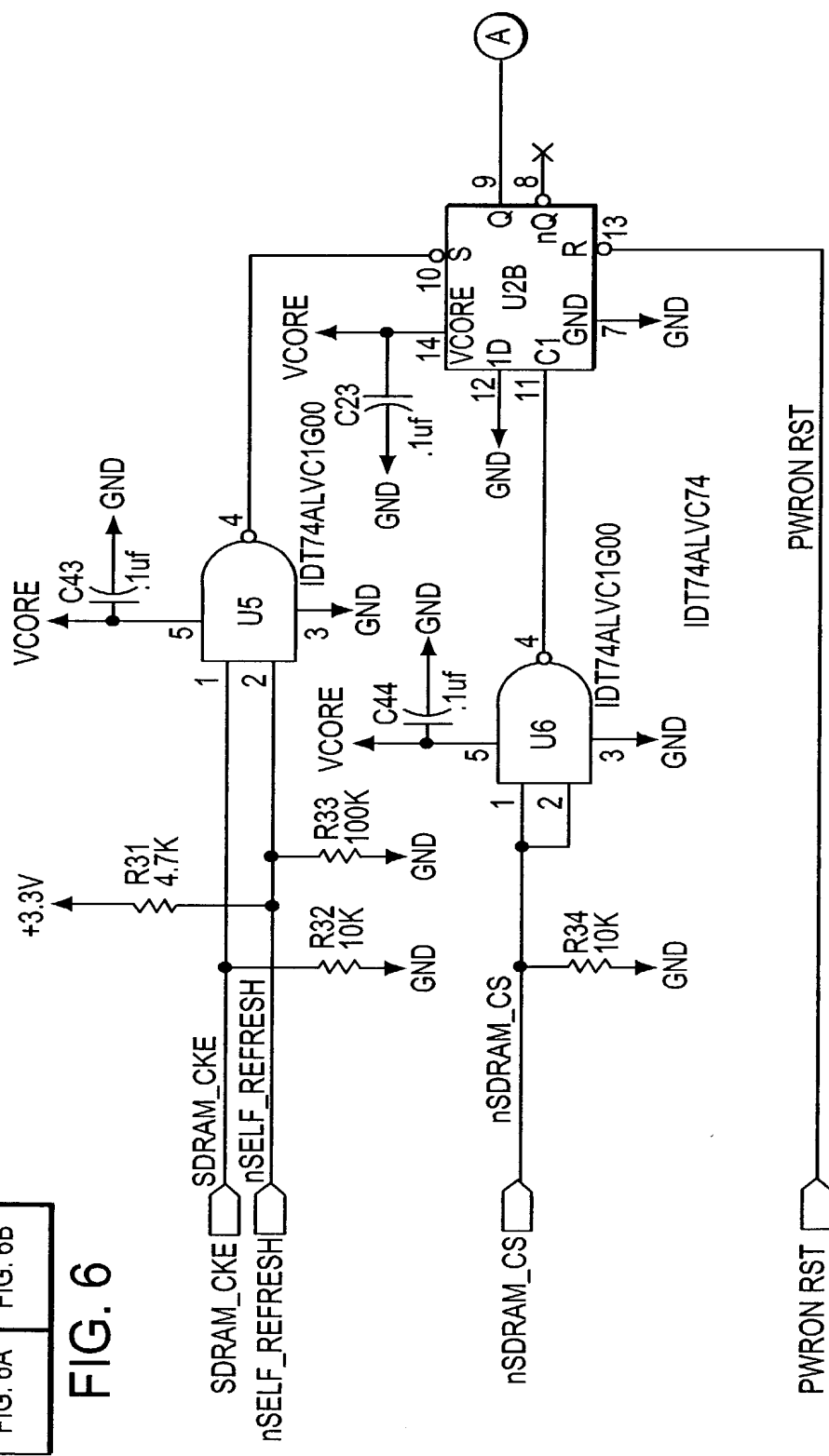


FIG. 5F

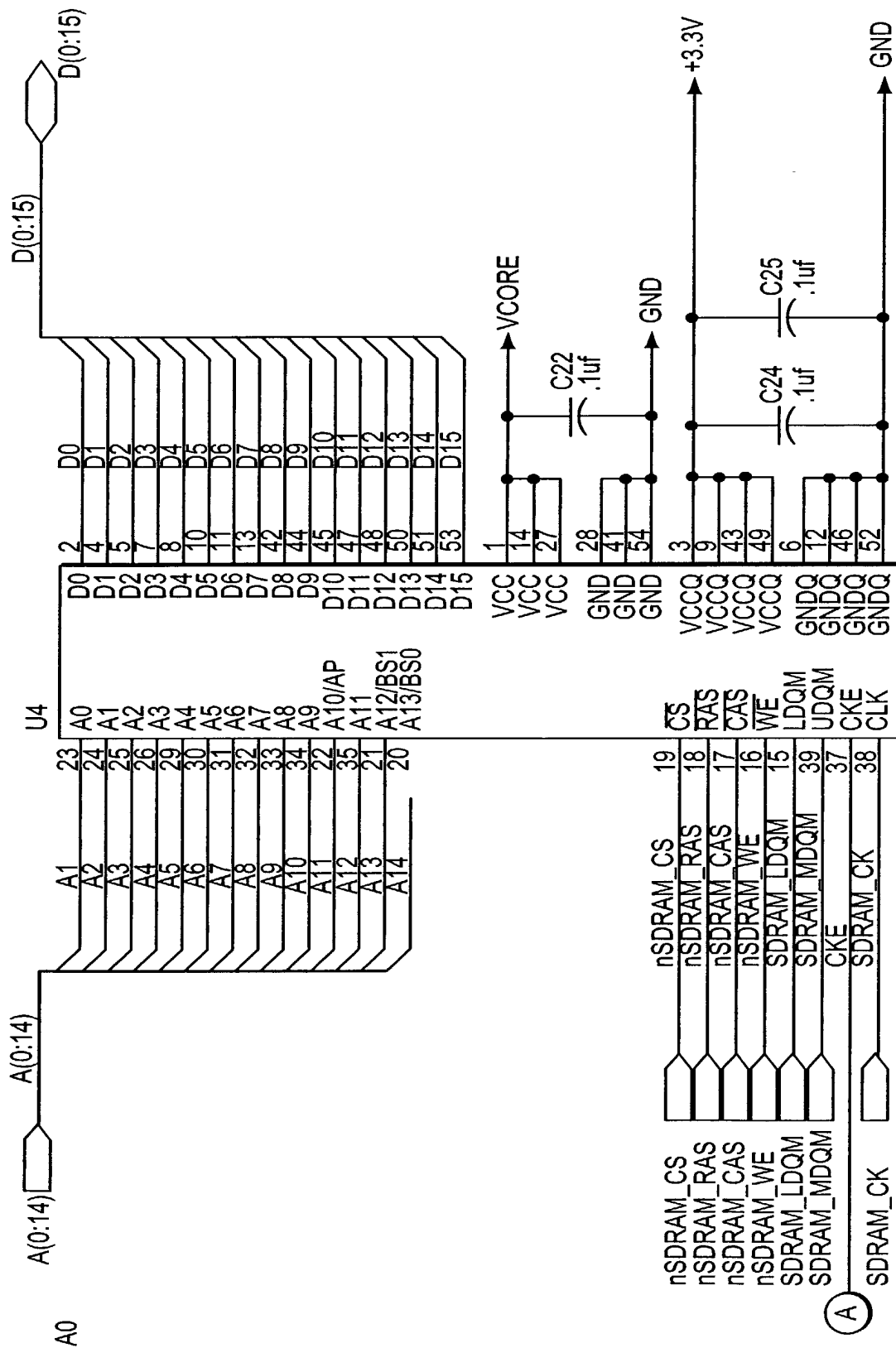
FIG. 6A

FIG. 6B



LOW POWER SDRAM SHOULD BE USED. POWER CONSUMPTION WHEN THE CAMERA IS SHUT DOWN DEPENDS ON THE SDRAM CONSUMPTION IN SELF REFRESH MODE AS THE MAJOR COMPONENT OF QUIESCENT CONSUMPTION.

FIG. 6A



SDRAM 4 MEG x 16 - LOW POWER

4M x 16 SDRAM SHOWN, CAN ALSO USE
1M x 16 WITHIN THE SAME FOOTPRINT.

NOTE: THIS DESIGN REQUIRES SDRAM PARTS
WITH ISOLATED V_{cc} AND V_{ccq} ON CHIP.

FIG. 6B

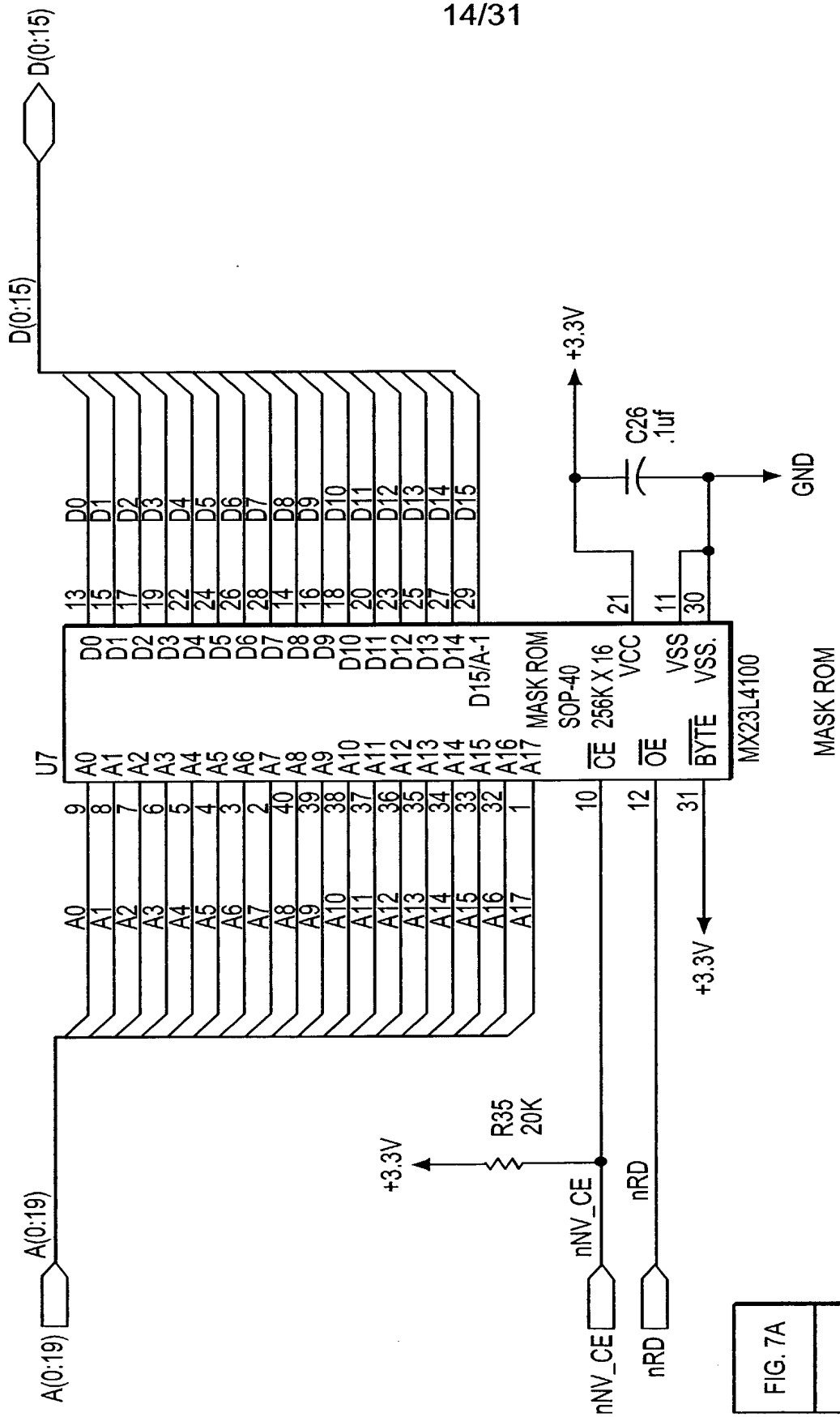


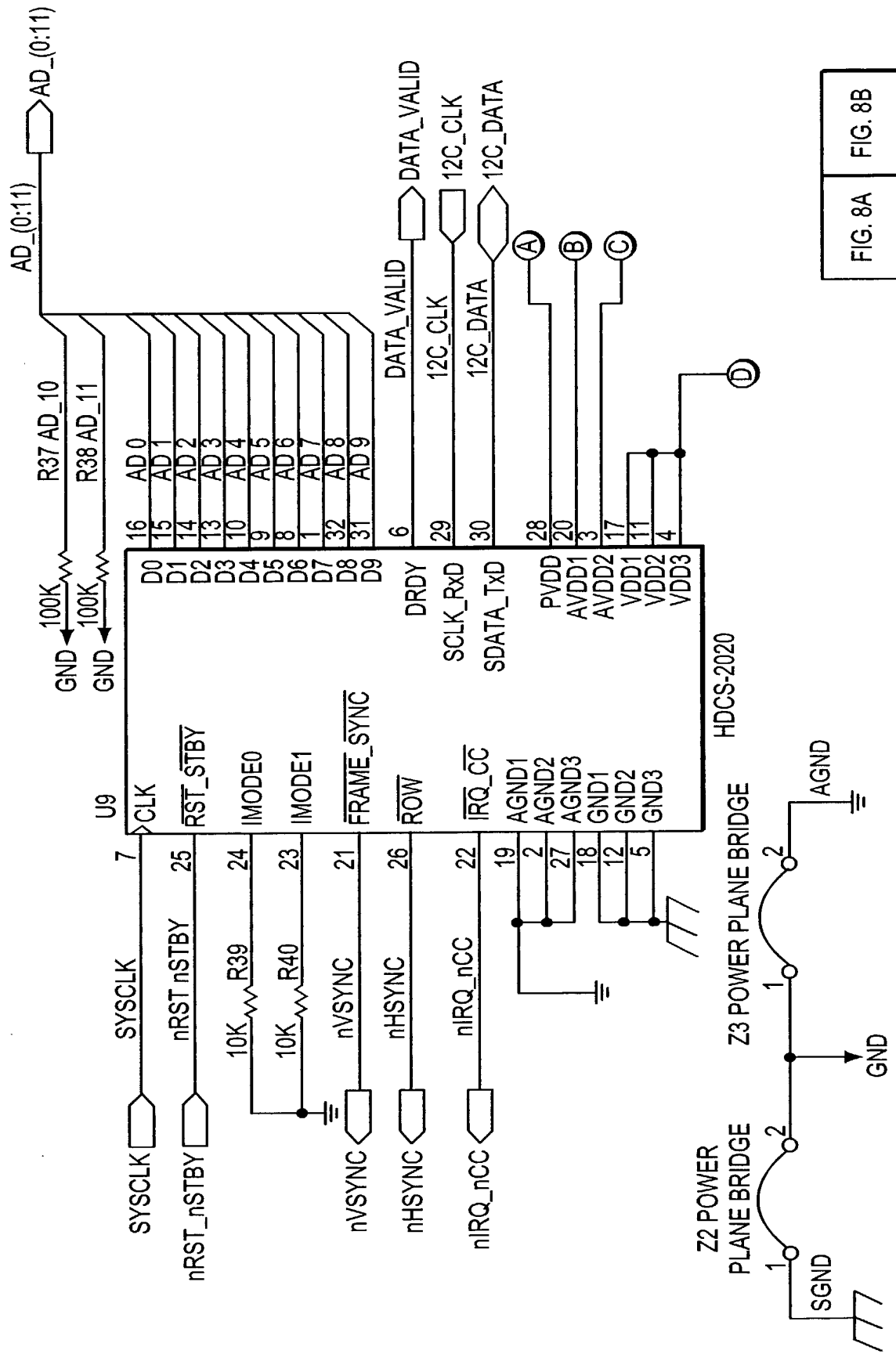
FIG. 7A

FIG. 7A
FIG. 7B

FIG. 7



FIG. 7B



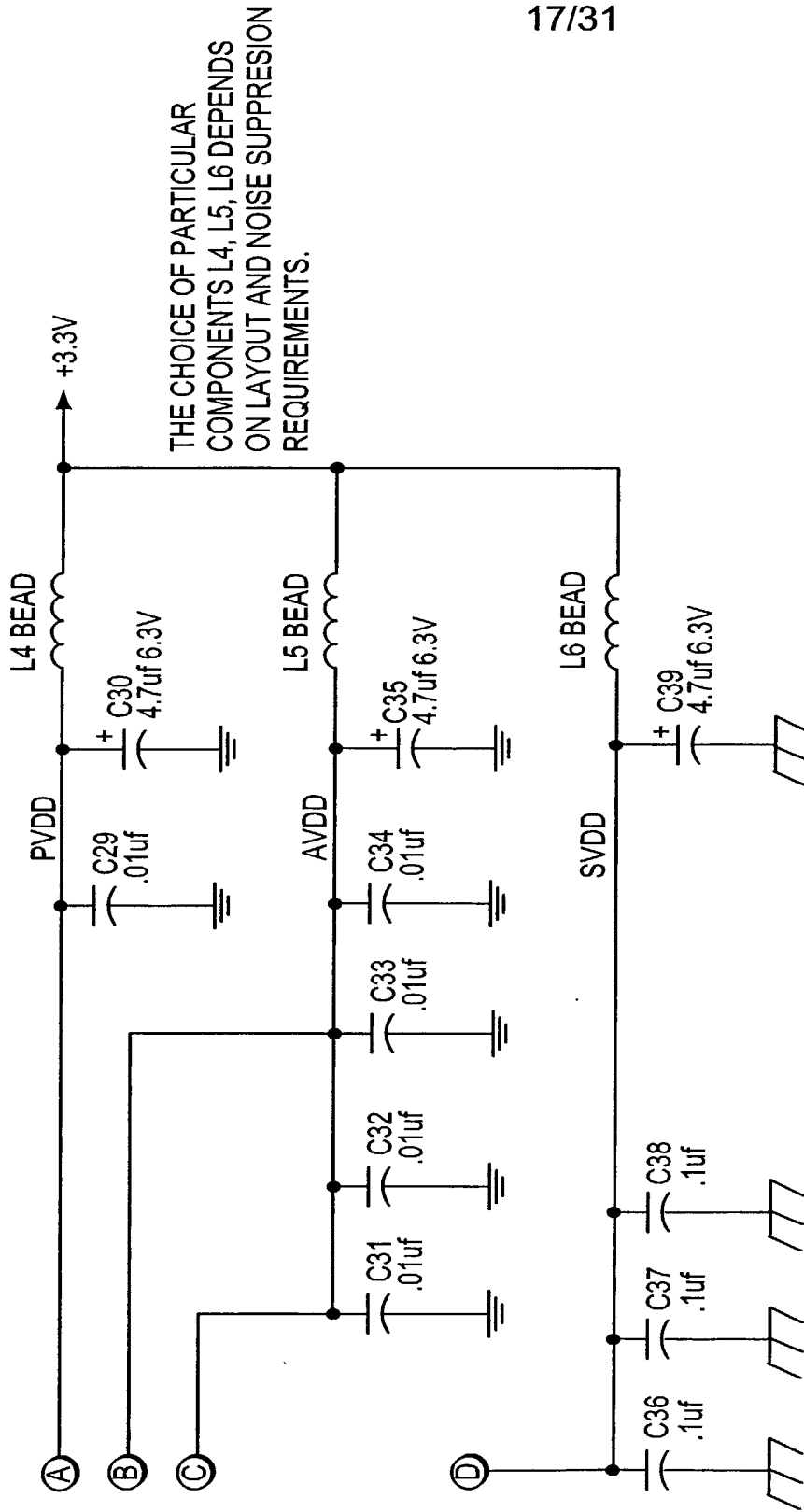
AGND AND SGND ARE PORTIONS OF THE GROUND PLANE PROTECTED WITH CUTS. THEY ARE NOT SEPARATE RUNS!

FIG. 8A

FIG. 8A FIG. 8B

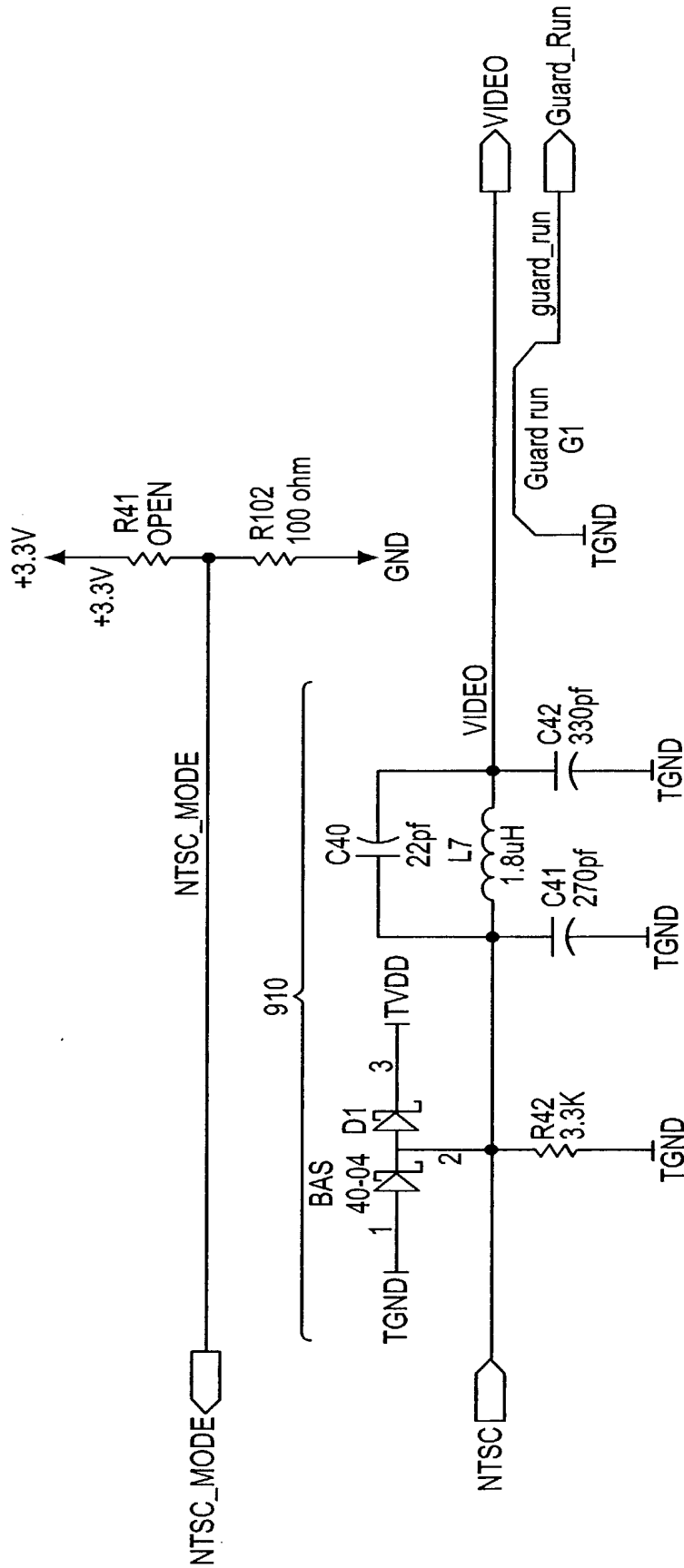
FIG. 8

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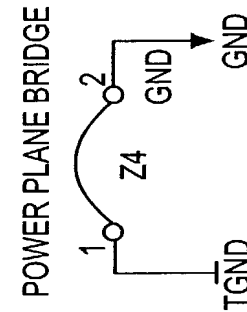


PLACE THESE CAPACITORS AND INDUCTORS (BEADS) AS CLOSE AS POSSIBLE TO THEIR RELEVANT PINS ON THE SENSOR PACKAGE. THIS GENERALLY REQUIRES MOUNTING THESE PARTS ON THE BACK OF THE BOARD BEHIND THE SENSOR TO ALLOW LENS MOUNTING. DOUBLE UP VIAS WHERE POSSIBLE, ESPECIALLY THE GROUND PLANE CONNECTIONS.

FIG. 8B



NOTE:
THE DIODE PIN NUMBERING SHOWN HERE IS
NON-STANDARD. MAKE SURE THE PCB LAYOUT
MATCHES THE DIODE(S) USED IN YOUR DESIGN.



TGND IS A PORTION OF THE GROUND PLANE
PROTECTED WITH CUTS. SEE CLARITY SHEET.
IT IS NOT A SEPARATE RUN!

FIG. 9

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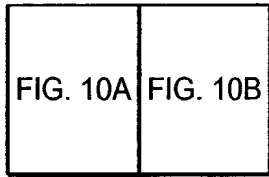
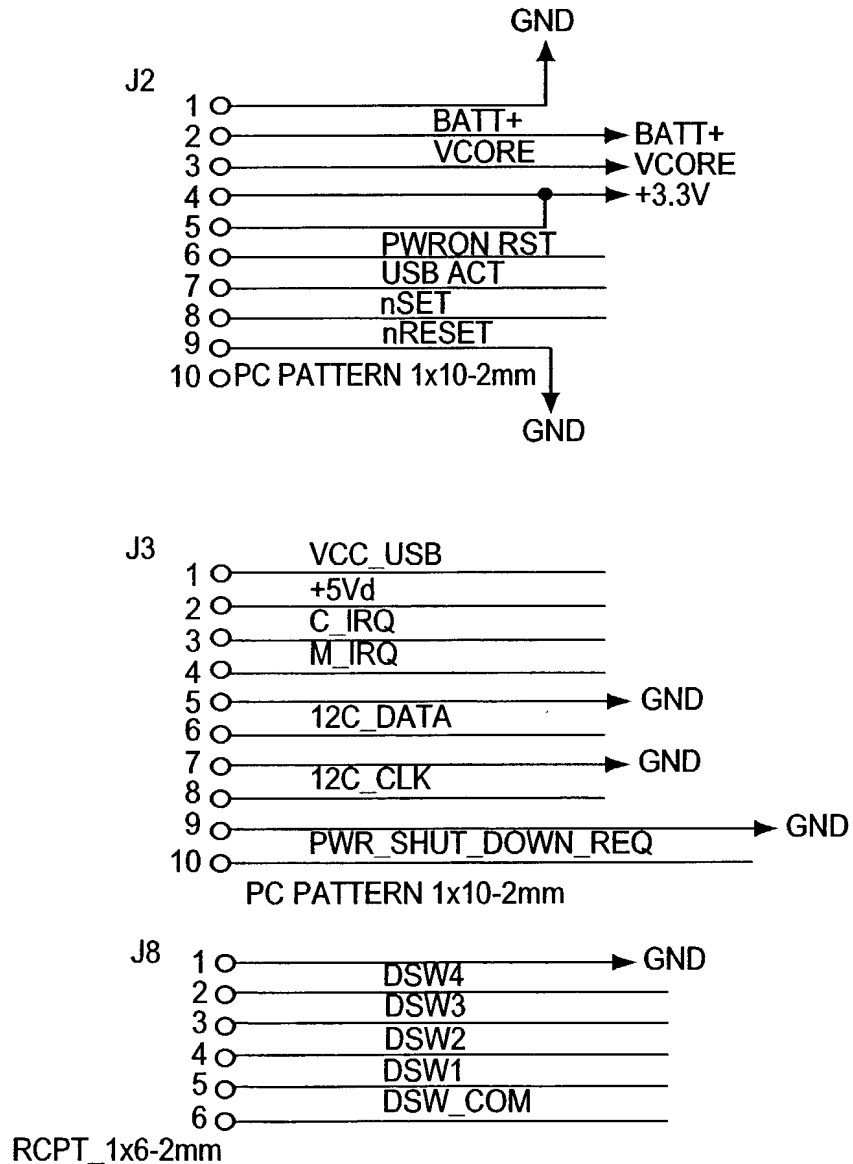


FIG. 10

MAIN BOARD CONNECTIONS



NOTE:
USE VERY WIDE TRACES FOR BATT+, +5Vd,
VCORE, VBB AND THE +3.3V POWER PATH,
PREFERABLY ON A POWER PLANE

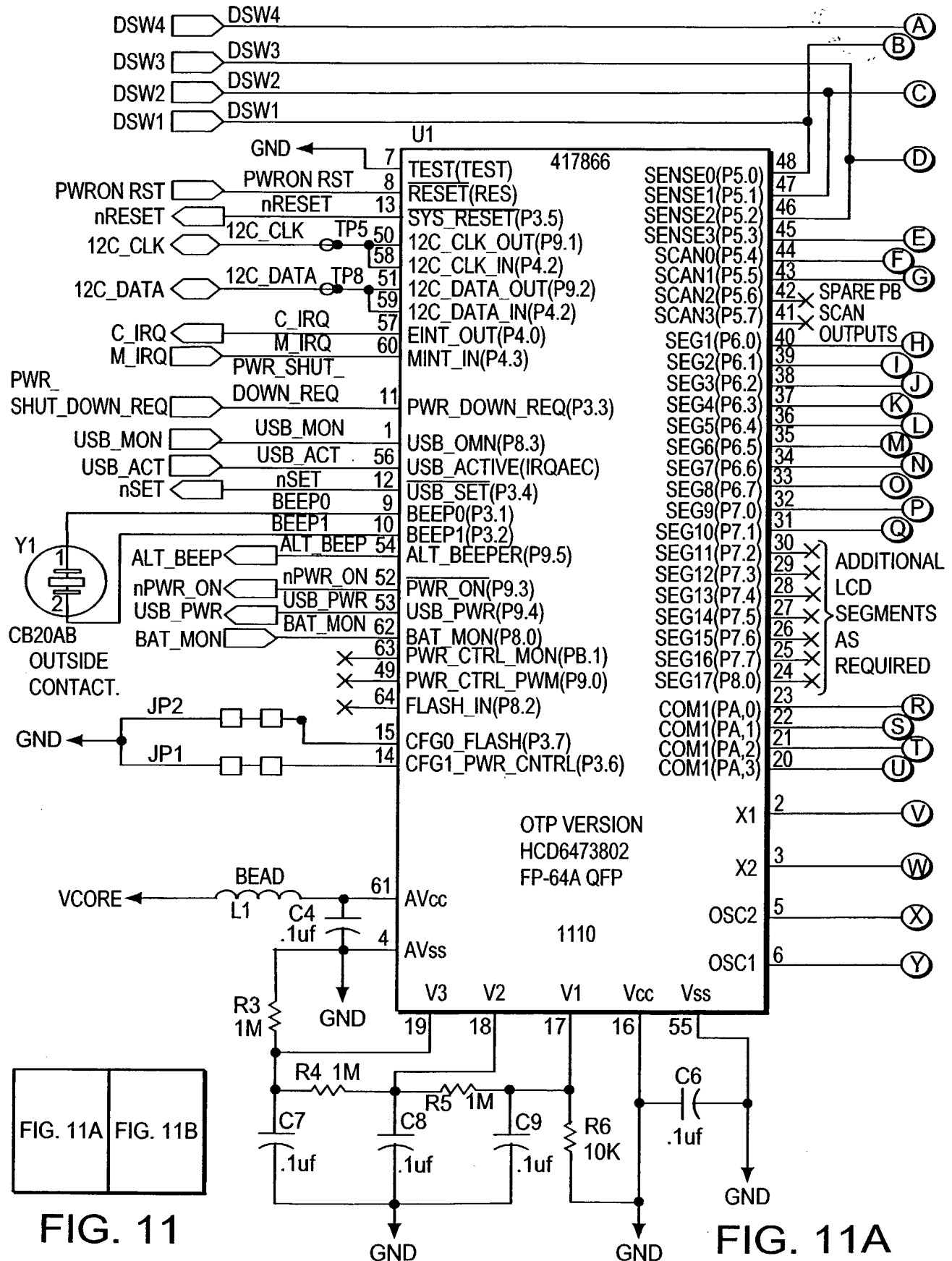
FIG. 10A

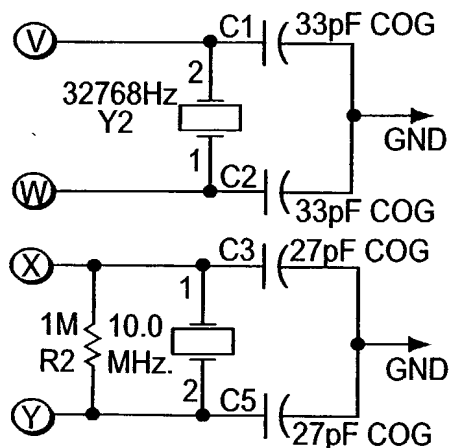
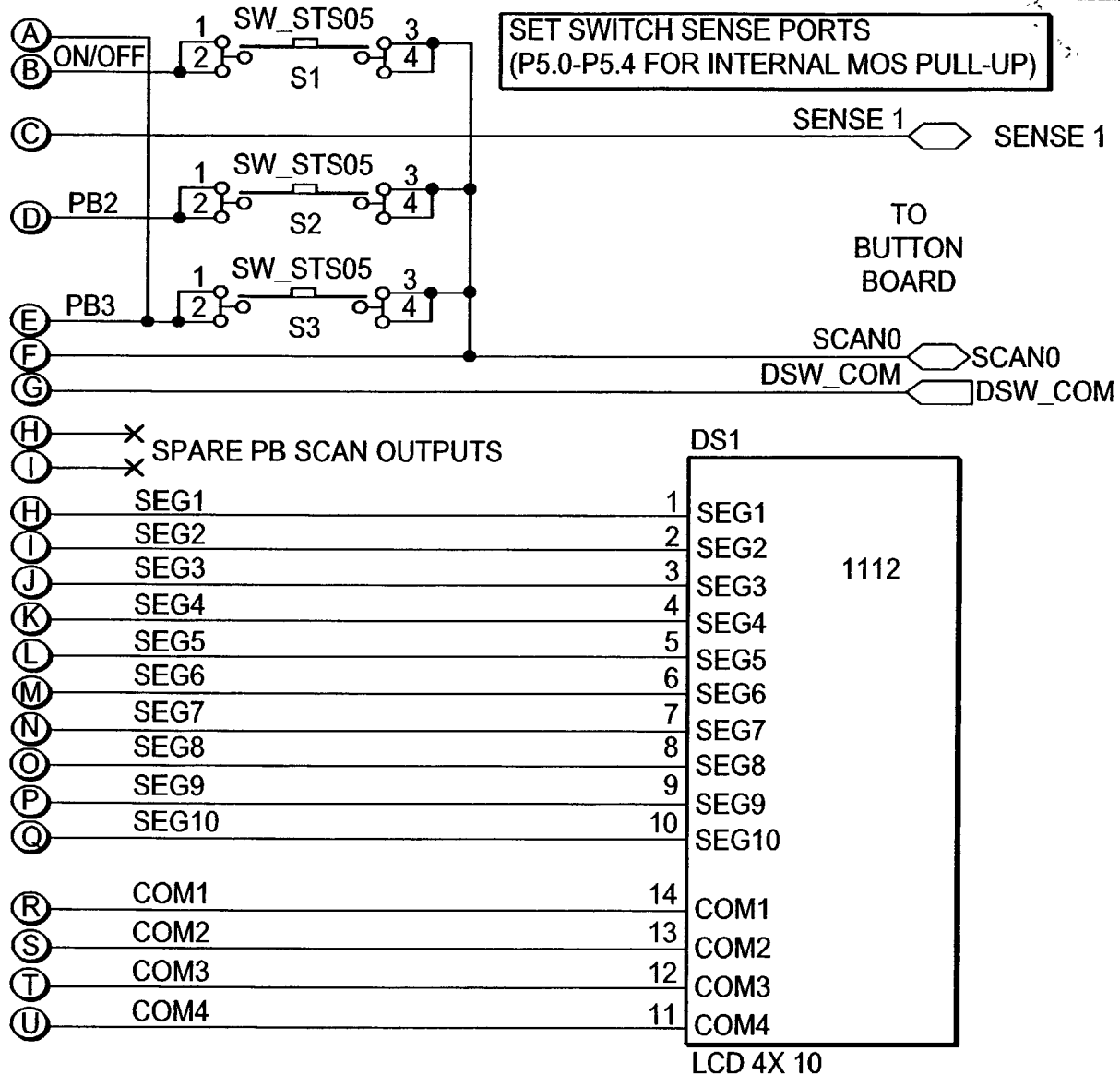
10



FIG. 10B

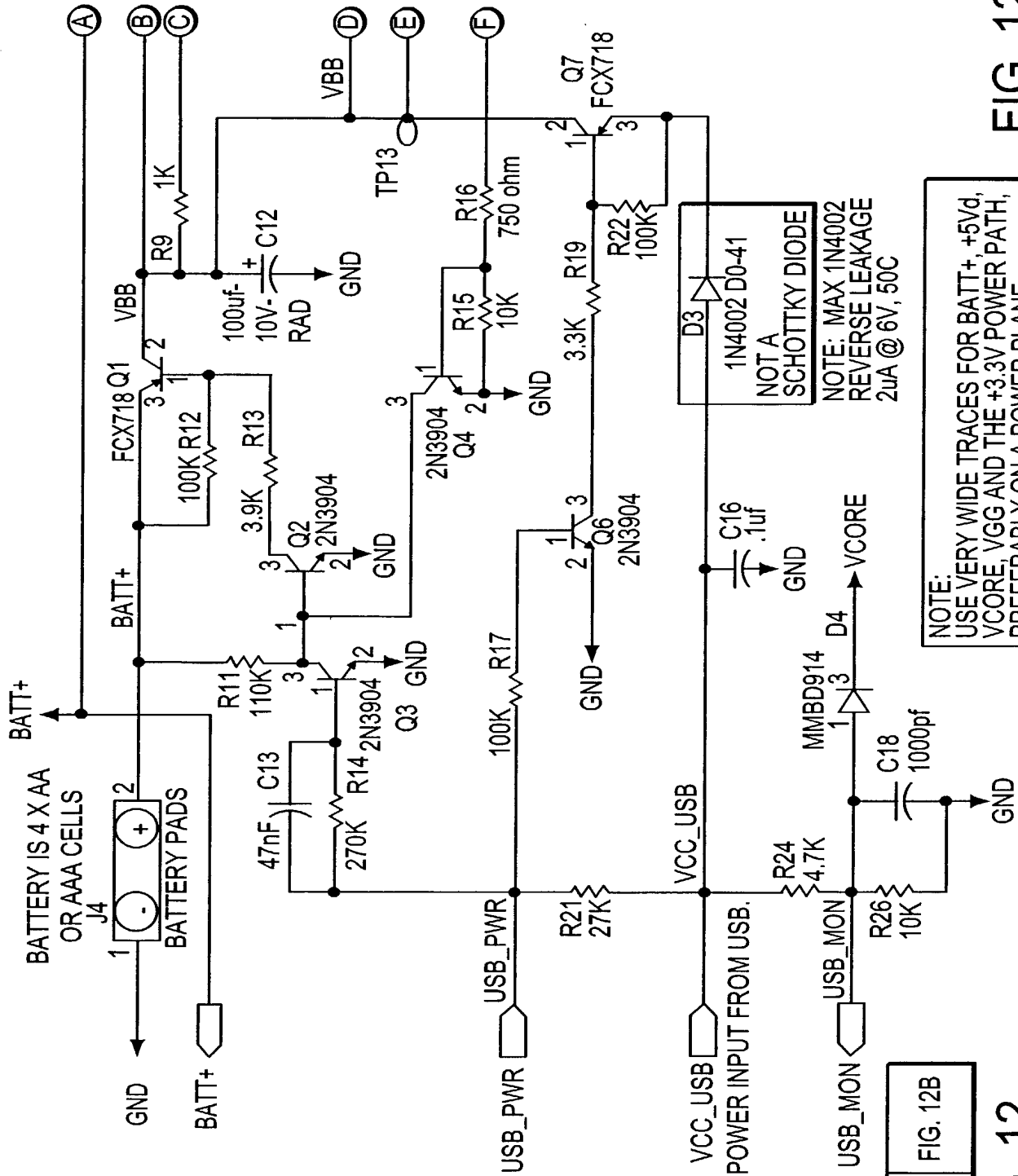
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- NOTES:**
1. SET UNUSED PORT PINS TO OUTPUT LOW.
 2. V_{CORE} IS USED AS THE ADC REFERENCE BY THE CONTROLLER.
 3. KEEP CRYSTAL AND RESONATOR CLOSE TO THE IC, SEE DATA SHEET.
 4. USE THE INTEGRAL PULL UP IN THE SWITCH PORTS.
 5. ON STARTUP USE P3.4 TO SET THE USB_ACT FLIP-FLOP BEFORE ENABLING THE IRQ TO SENSE USB DATA ACTIVITY.
 6. THE H8/3802 IC SHOWN IS THE OTP VERSION FOR DEVELOPMENT ONLY. FOR PRODUCTION USE THE MASK ROM VERSION, HD6433800H OR THE LOWEST COST COB VERSION; HCD6433800-(***).
 7. SET PORT 9 TO HIGH CURRENT MODE.

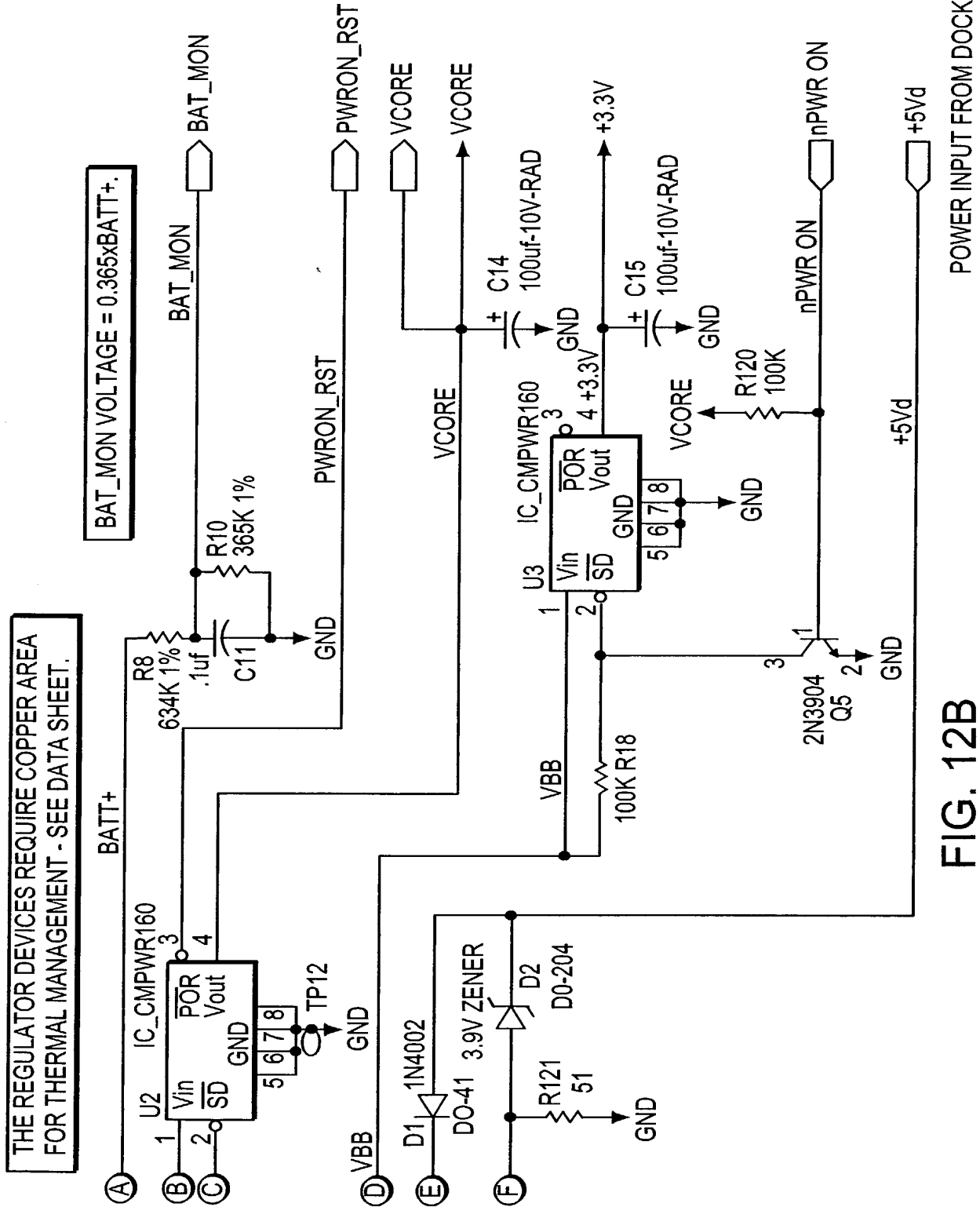
FIG. 11B



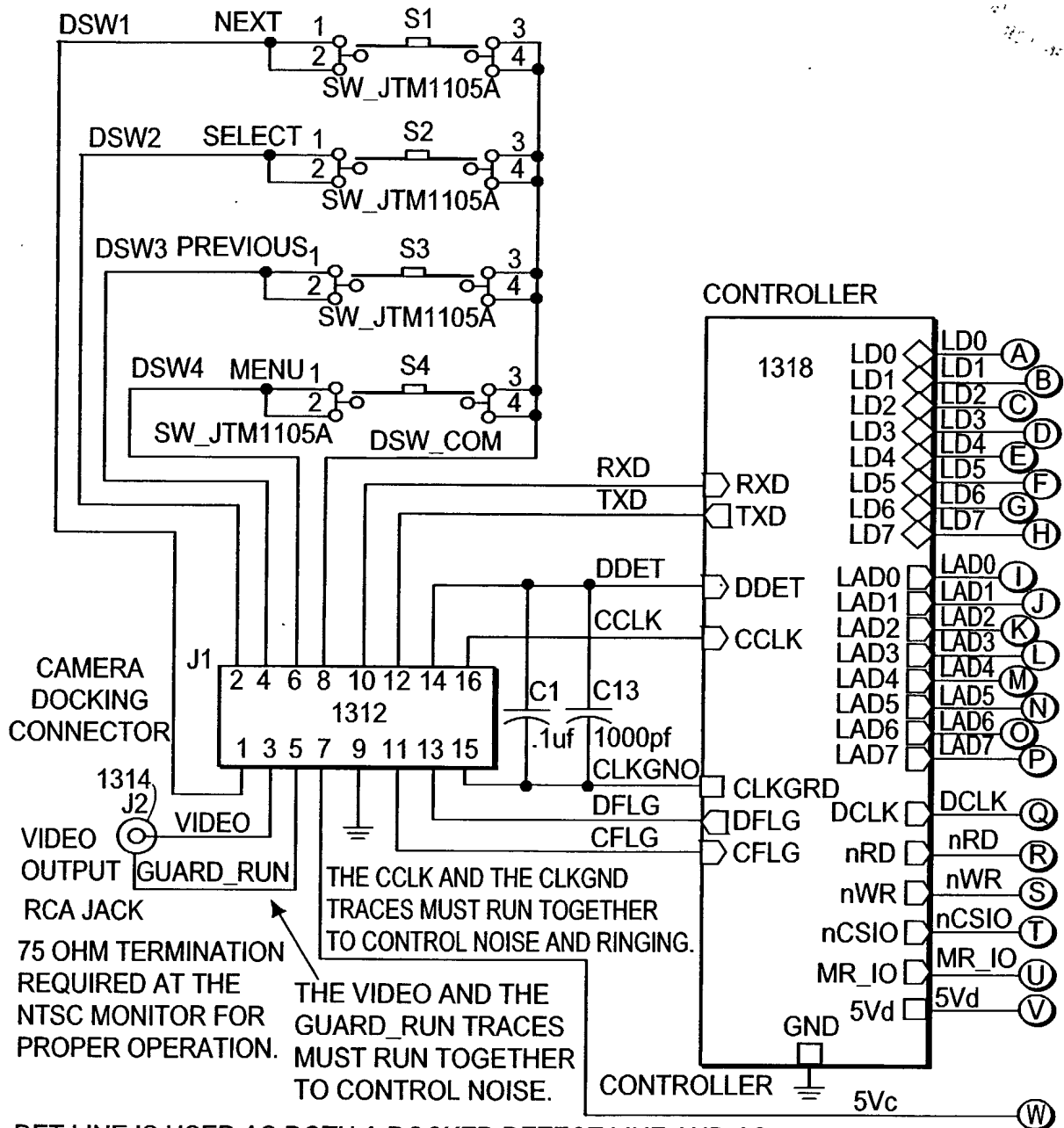
NOTE:
USE VERY WIDE TRACES FOR BATT+, +5Vd,
VCORE, VGG AND THE +3.3V POWER PATH,
PREFERABLY ON A POWER PLANE

FIG. 12A

FIG. 12



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DET LINE IS USED AS BOTH A DOCKED DETECT LINE AND AS PART OF THE CLOCK BALANCING. MOUNT THE BYPASS CAPACITORS CLOSE TO THE BASE RESISTOR FOR THE RESET TRANSISTOR, Q1, ON THE CONTROLLER PAGE.

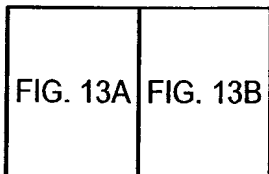


FIG. 13

FIG. 13A

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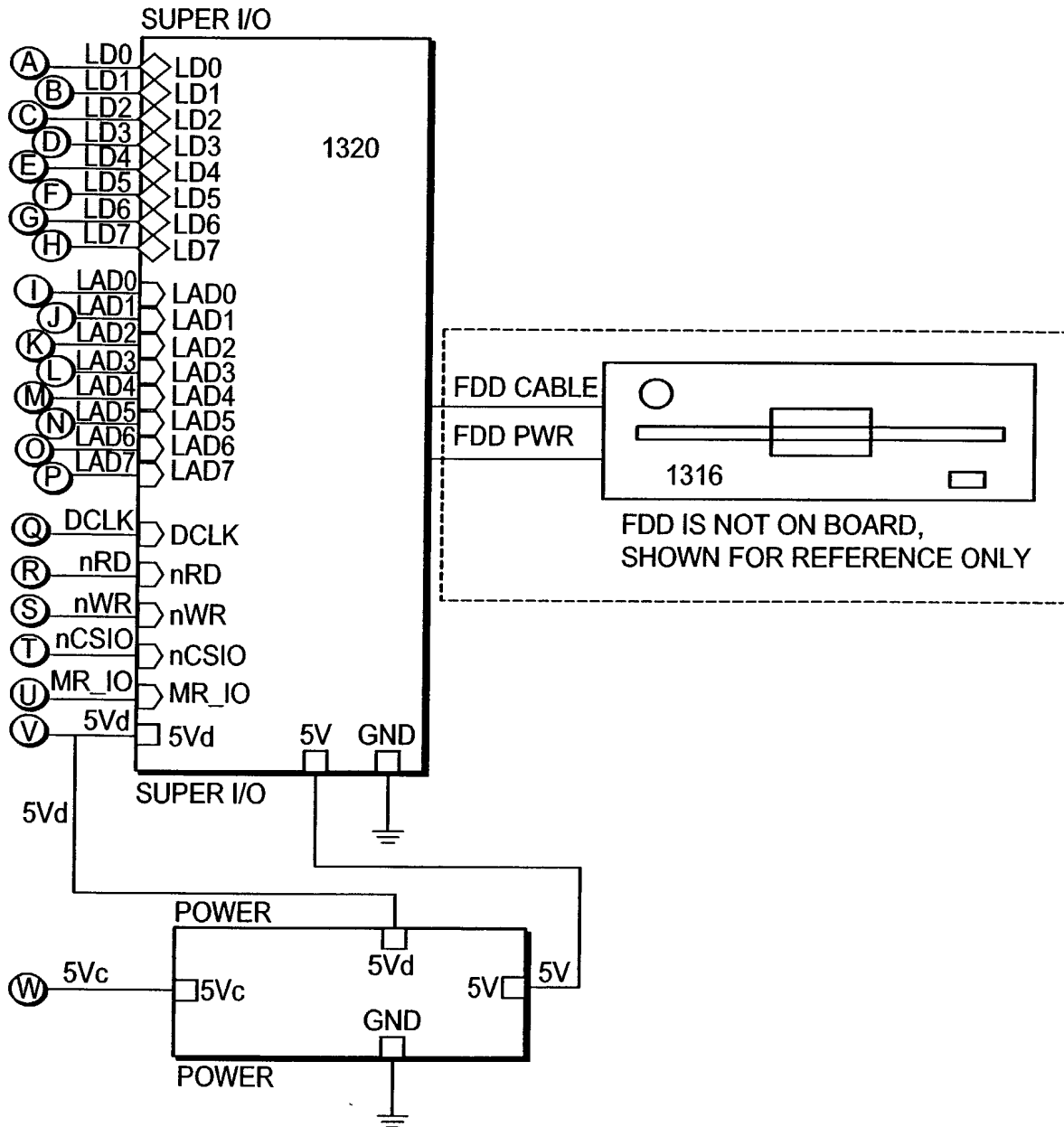


FIG. 13B

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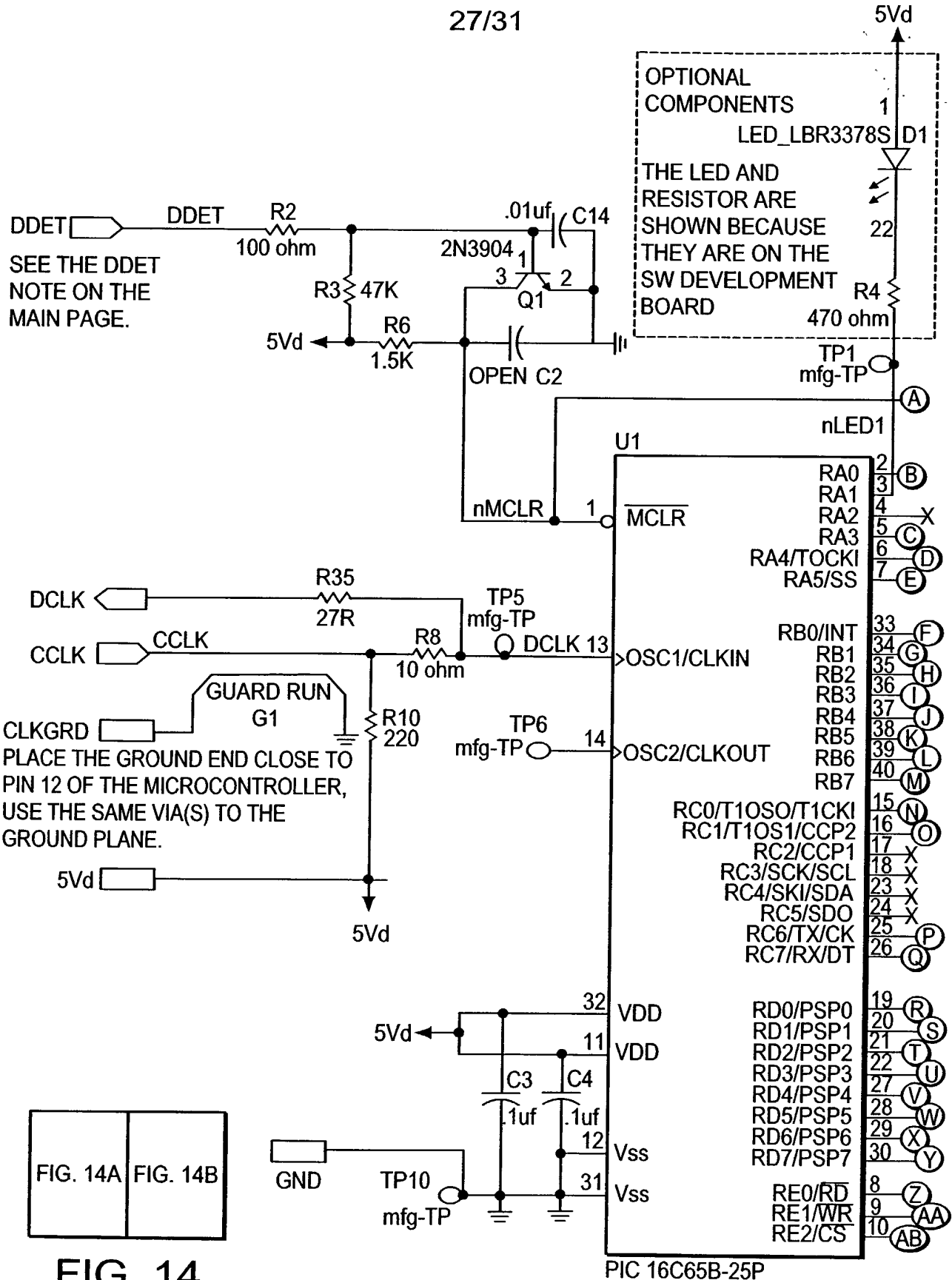


FIG. 14A

FIG. 14

FIG. 14A

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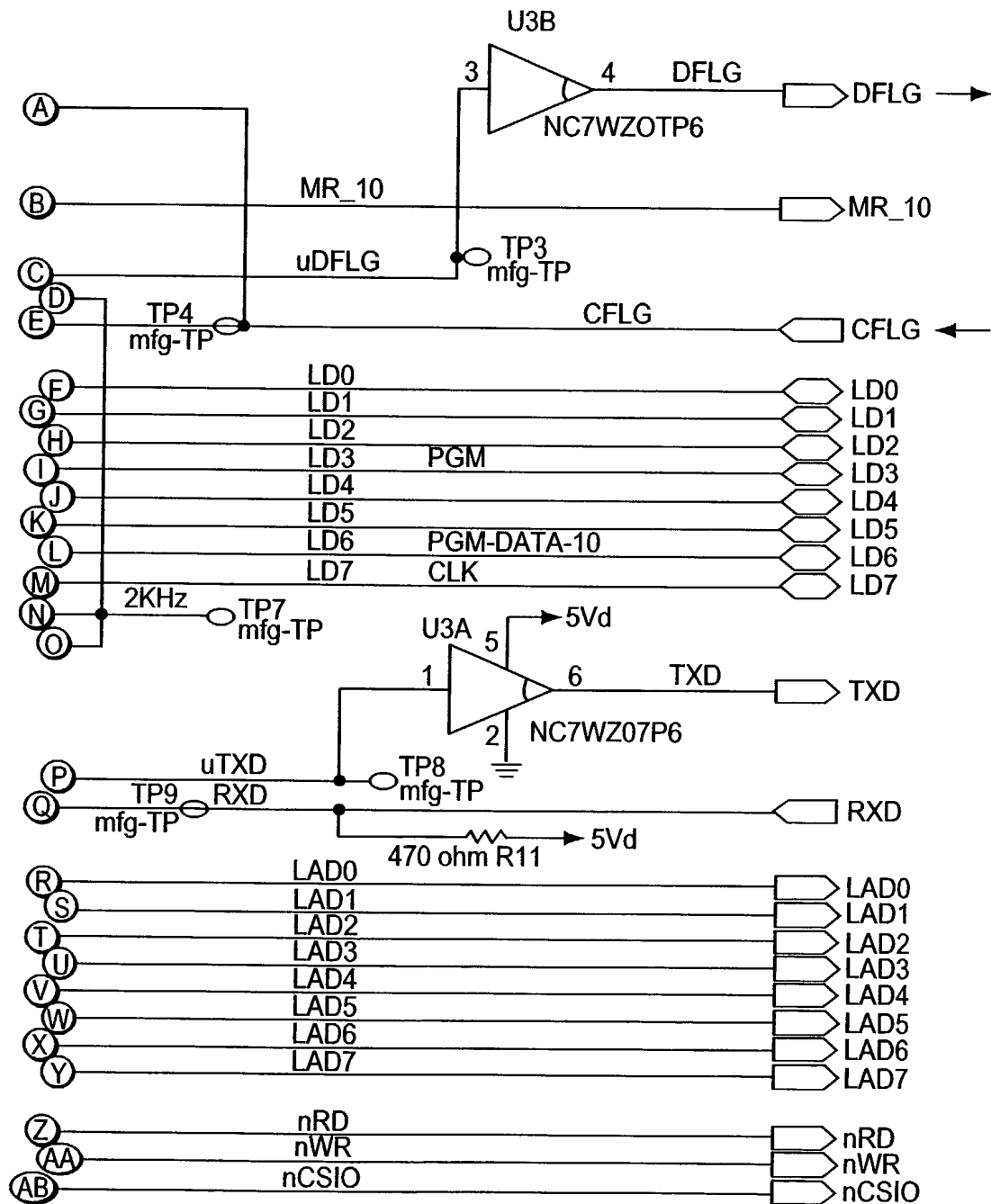
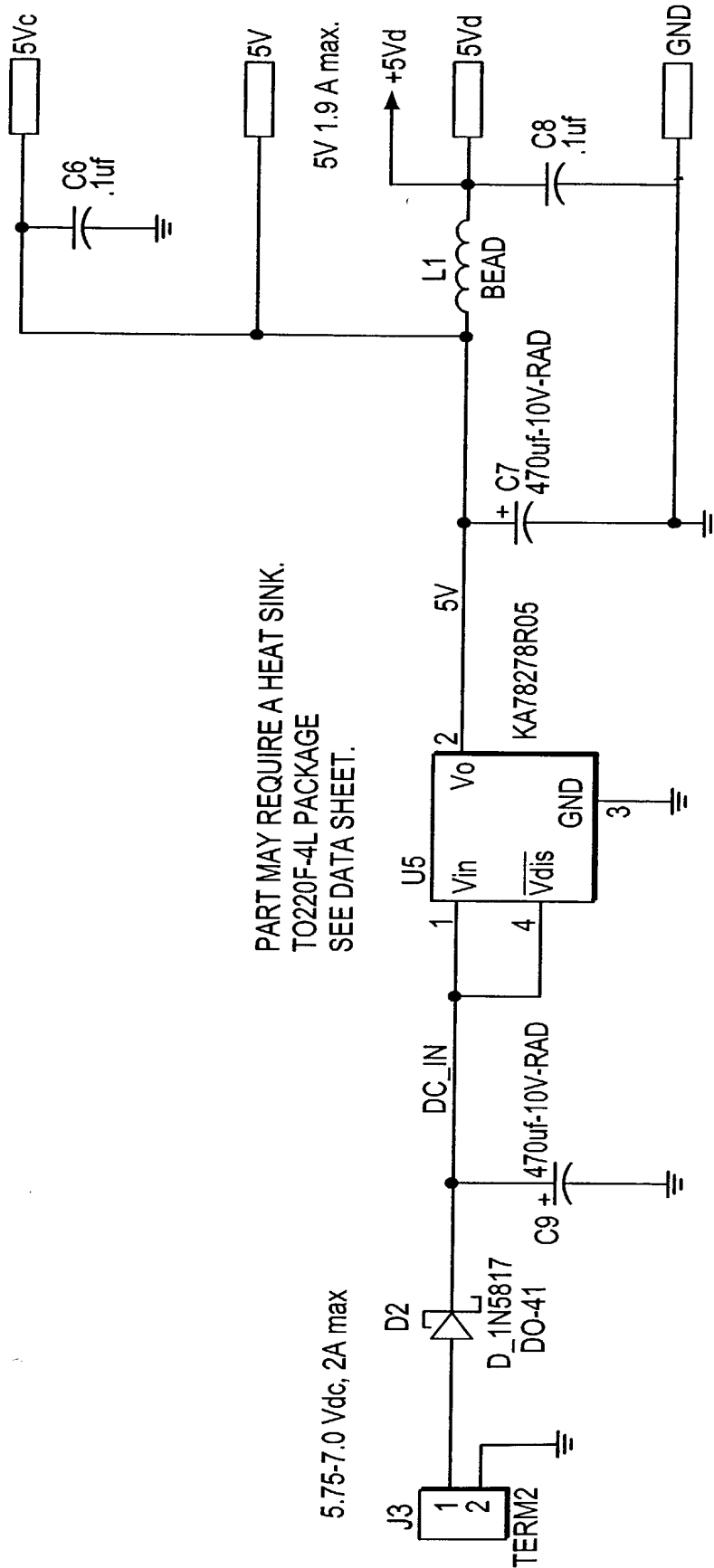


FIG. 14B



**PART MAY REQUIRE A HEAT SINK.
TO220F-4L PACKAGE
SEE DATA SHEET.**

NOTE POWER SUPPLY IS TO BE SIZED FOR THE PARTICULAR FLOPPY DISK DRIVE'S MAXIMUM LOAD, ALLOW ~300 ma FOR OTHER LOADS

SIZING AFFECTS CHOICE OF U5 AND ITS HEATSINK, THE FILTER CAPACITORS, C7, C9 AND THE AC ADAPTER RATING.

FIG. 15

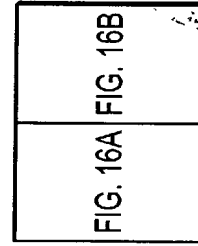


FIG. 16

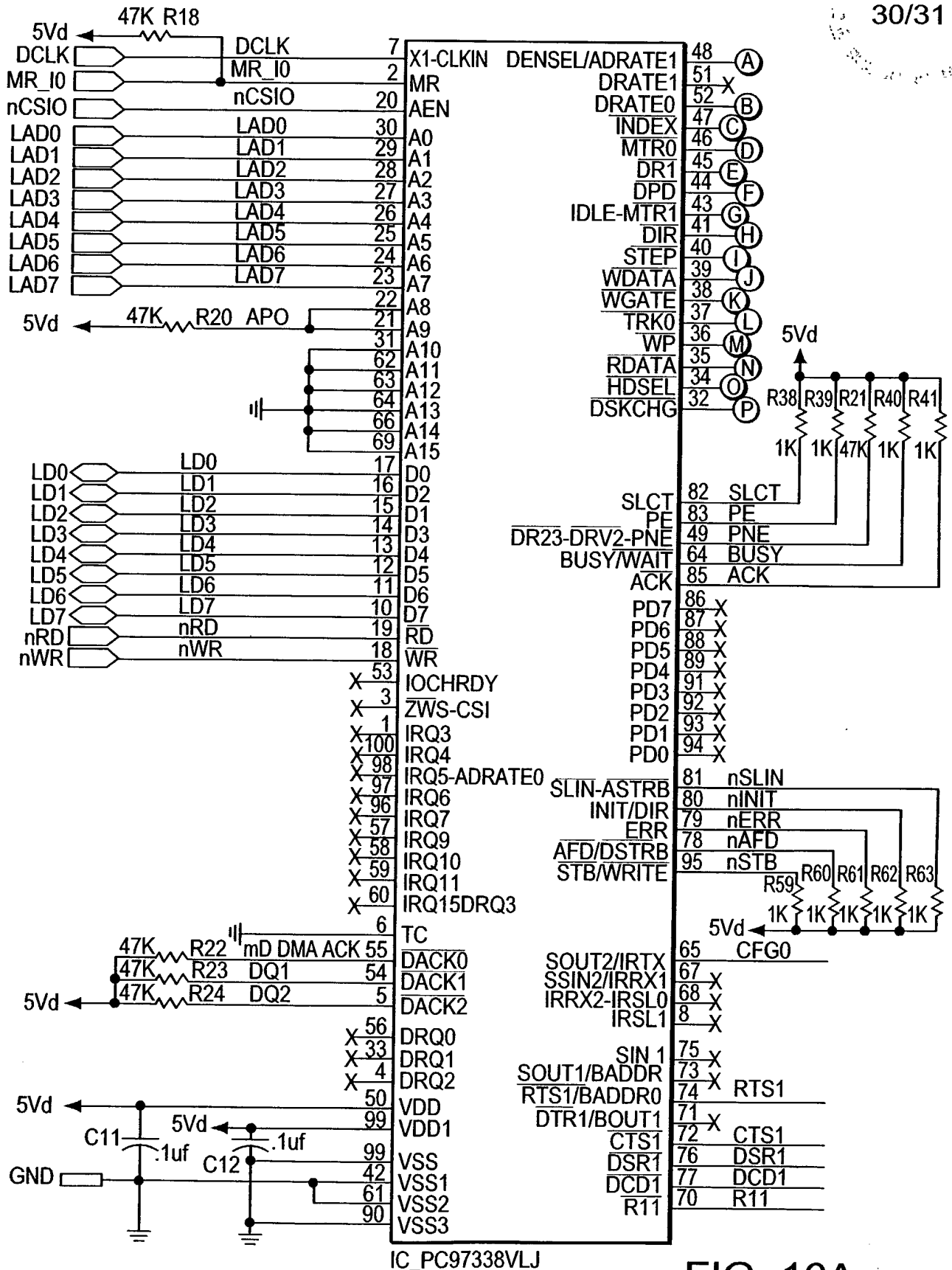
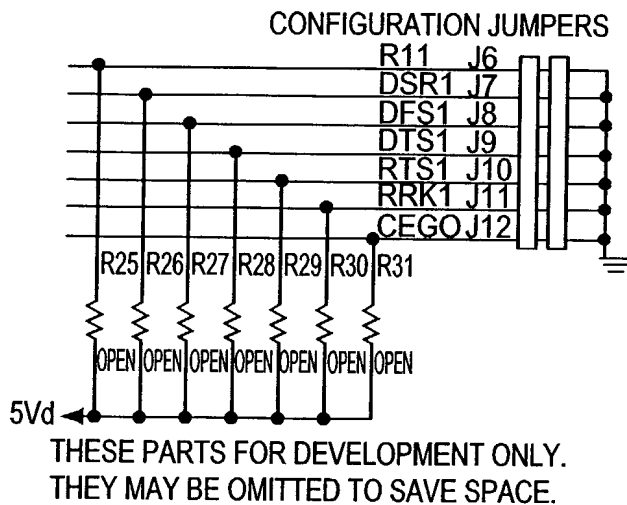
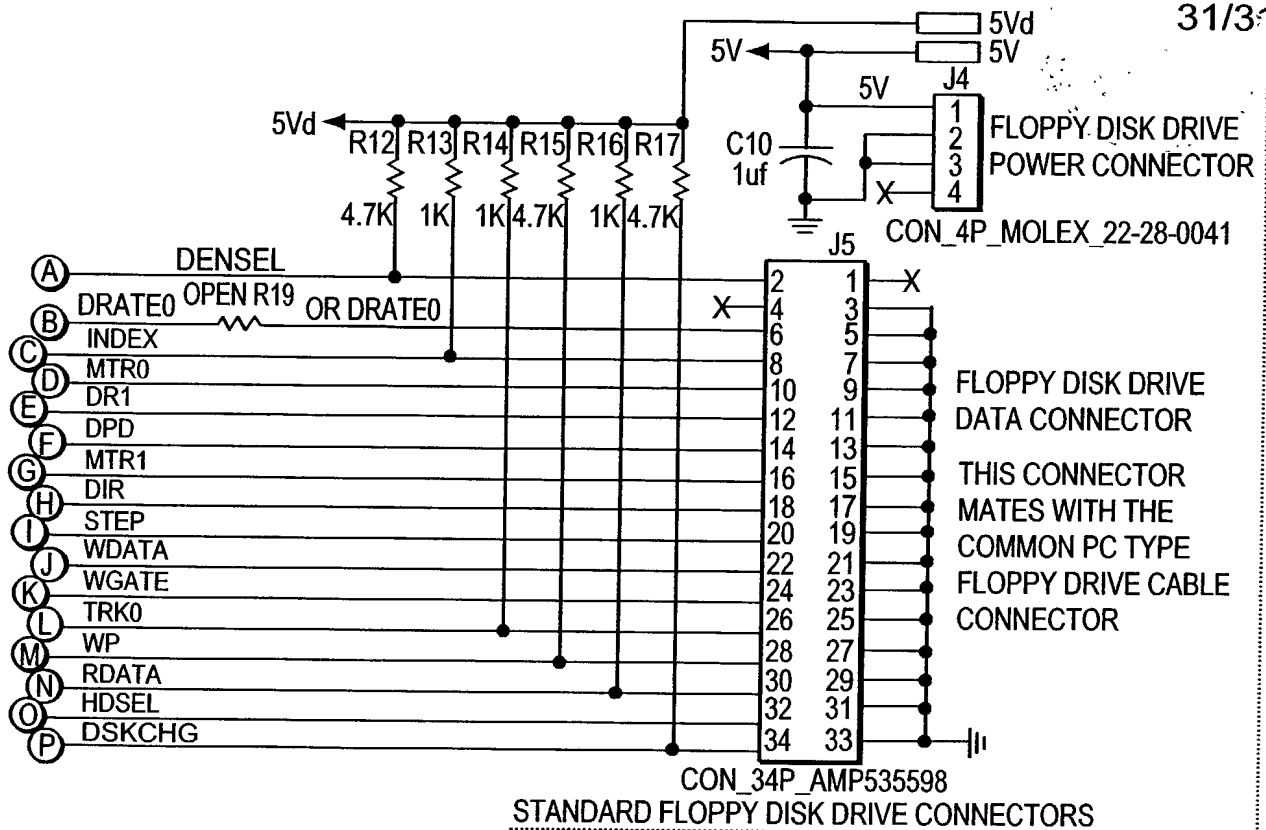


FIG. 16A



EITHER OR BOTH OF THE FDD CONNECTORS MAY BE USED. IF THE FULL SIZE 34 PIN CONNECTOR IS USED, BE SURE TO INCLUDE THE 4 PIN POWER CONNECTOR WHICH IS NOT REQUIRED WITH THE THIN DRIVE 26 PIN CONNECTOR.

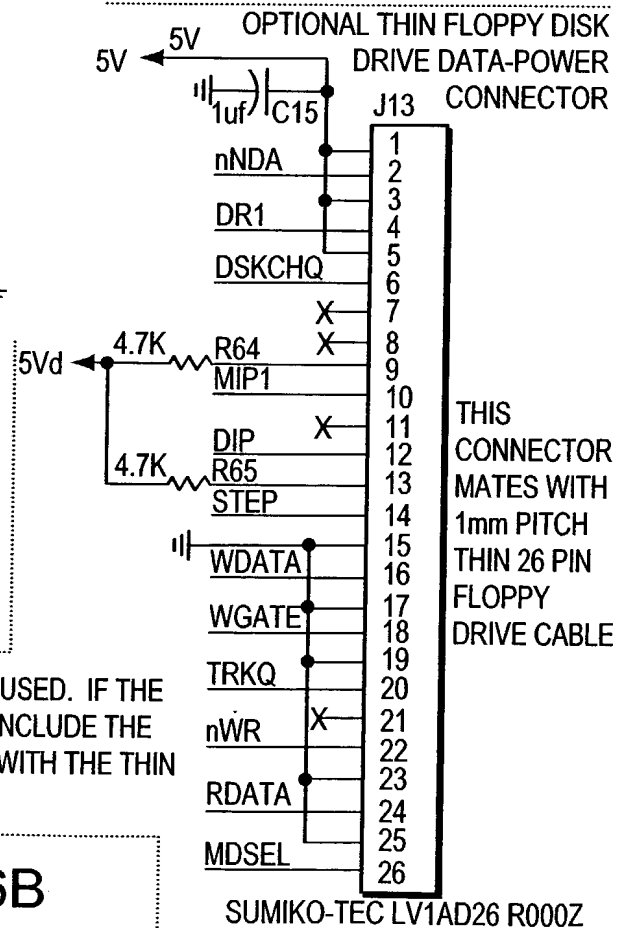


FIG. 16B